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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,709	09/29/2003	Howard W. Fleeger	HFD 001A	6321

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EXAMINER

SALDANO, LISA M

ART UNIT PAPER NUMBER

3673

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,709

Applicant(s)

FLEEGER, HOWARD W.

Examiner

Lisa M. Saldano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/3/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification does not appear to provide disclosure of the open-channel system of claims 4 and 20.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fluid path as an open-channel system, as claimed in claims 4 and 20, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, it is unclear how the fluid path within the vessel can possibly be an open-channel system. These claims have not been examined, as it is not clear what the applicant intends to claim.

Claim Objections

5. Claims 4 and 20 are objected to because of the following informalities:

Regarding claims 4 and 20, the limitations recited in these claims do not appear to have antecedent basis in the specifications. Please clarify. Furthermore, it is not clear how the fluid path within the vessel can possibly be an open-channel system. Please clarify.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5-11, 17-19 and 21-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauer (4,094,338).

Regarding claims 1, 7, 17 and 23-26, Bauer discloses a floating weir assembly for removing fluid from a vessel 12 comprising buoyancy means in the form of floatation member 18 and a fluid inlet at the top opening of weir member 20 (see Fig.5). The fluid inlet is affixed to the buoyancy means through adjustable brackets 21,23. The weir opening is positioned at a distance **H** below the liquid level **E** such that it is submerged in the fluid. Bauer discloses that the weir opening is vertically adjustable by means of elements 23 (see column 2, lines 43-50). The adjustment may be made to adjust the vertical position of the weir opening relative to the surface of the fluid. Bauer further discloses a fluid outlet at the junction of conduit 28 and an outer portion of the vessel 12.

Regarding claims 2 and 18, Bauer discloses conduit 28 that forms a fluid path for connecting an exit opening at the bottom of weir 20 to the fluid outlet formed on the conduit 28.

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The structure of the invention is such that the rate of flow of the fluid from the vessel through the floating weir assembly is limited by the rate of flow of the fluid into the fluid inlet through the weir opening.

Regarding claims 3 and 19, Bauer discloses that the flow through the vessel is caused by the gravitational attraction between the earth and the liquid (see column 2, lines 23-26).

Regarding claims 5, 6, 21 and 22, Bauer discloses that the floatation member 18 is constructed of a light material such as cork, foam-filled fiber-glass, foamed plastics and the like (see column 2, lines 26-32). The range of optimal buoyancy of the floatation member can be found through routine experimentation.

Regarding claims 8, 9, 27 and 28, Bauer discloses brackets 21,23 and counterbalancing springs 25,26 to maintain the floating weir assembly in desired orientation, including horizontal orientation, within the vessel. The counterbalancing springs serve as further adjustment means for adjusting buoyancy as well as the position of the weir opening relative to the surface of the fluid.

Regarding claim 10, Bauer discloses that the invention achieves a constant discharge rate of flow wherein the fluid level fluctuates in elevation (see abstract).

Regarding claim 11, Bauer discloses counterbalancing springs 25,26 that also function as adjusting ballast in response to changes in the level of fluid in the vessel 12. NOTE that the applicant of the present invention clearly states that an example of a means for adjusting ballast may be a spring assembly (see page 15 of the specifications of the present invention).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claim 7 above in view of Ayukawa et al. (JP-2003147844-A).

Bauer discloses the floating weir assembly as disclosed above. Bauer discloses that the vessel 12 may contain raw sewage for subsequent sewage treatment in a system comprising the vessel (see Fig.1 and column 1).

However, Bauer fails to explicitly disclose that the sewage placed in the system may comprise rainwater.

Ayukawa et al. disclose a method and device for controlling drain sterilizer wherein sewage contains rainwater (see abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide rainwater in the vessel of Bauer's invention, as taught by Ayukawa et al. because sewage commonly contains at least a fraction of rainwater, which is also processed.

10. Claims 13, 29-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claim 7 above in view of Diggs (3,966,604).

Bauer discloses the floating weir assembly as described above. Bauer discloses that the vessel 12 may contain raw sewage for subsequent sewage treatment in a system comprising the vessel (see Fig.1 and column 1). Bauer discloses brackets 21,23 and counterbalancing springs 25,26 to maintain the floating weir assembly in desired orientation, including horizontal orientation, within the vessel. The counterbalancing springs serve as further adjustment means for adjusting buoyancy as well as the position of the weir opening relative to the surface of the fluid.

However, Bauer fails to explicitly disclose that the vessel is an irrigation channel and the fluid outlet communicates with an irrigation system.

Diggs discloses an apparatus for aerobic decomposition of sewage that reduces raw sewage into an effluent suitable for use on irrigation (see column 1, lines 1-10). Diggs further discloses a weir or flow-through channel 23 that effluent flows through in the process of treatment (see column 3, lines 5-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the vessel of Bauer in a sewage treatment process for provision of irrigation fluid, as taught by Diggs, because sewage treatment processes as commonly used to treat fluid to the point of being non-potable, but suitable for hydrating vegetation.

11. Claims 14-16 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1 and 17 above.

Bauer discloses the invention as described above. To review, Bauer discloses a floating weir assembly for removing fluid from a vessel 12 comprising buoyancy means in the form of

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floatation member 18 and a fluid inlet at the top opening of weir member 20 (see Fig.5). The fluid inlet is affixed to the buoyancy means through adjustable brackets 21,23. The weir opening is positioned at a distance **H** below the liquid level **E** such that it is submerged in the fluid. Bauer discloses that the weir opening is vertically adjustable by means of elements 23 (see column 2, lines 43-50). The adjustment may be made to adjust the vertical position of the weir opening relative to the surface of the fluid. Bauer further discloses a fluid outlet at the junction of conduit 28 and an outer portion of the vessel 12.

Regarding claim 16, Bauer discloses counterbalancing springs 25,26 that also function as adjusting ballast in response to changes in the level of fluid in the vessel 12. NOTE that the applicant of the present invention clearly states that an example of a means for adjusting ballast may be a spring assembly (see page 15 of the specifications of the present invention).

Although Bauer fails to explicitly disclose that the invention comprises method steps, the Bauer disclose provides the basic method steps required to develop the method of controlling the rate of flow of a fluid from as vessel as claimed by the applicant of the present invention.

12. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as modified by Diggs, as applied to claim 29 above, in further view of Ayukawa et al. (JP-2003147844-A).

Bauer and Diggs disclose the inventions as described above. Specifically, Bauer discloses that the vessel 12 may contain raw sewage for subsequent sewage treatment in a system comprising the vessel (see Fig.1 and column 1).

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However, Bauer fails to explicitly disclose that the sewage placed in the system may comprise rainwater.

Ayukawa et al. disclose a method and device for controlling drain sterilizer wherein sewage contains rainwater (see abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide rainwater in the vessel of Bauer's invention, as taught by Ayukawa et al. because sewage commonly contains at least a fraction of rainwater, which is also processed.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Deines (6,647,804), Knobloch et al (6,391,202) and Whitaker (3,792,499) disclose features that are pertinent to the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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